

AMENDMENTS TO THE SPECIFICATION

At page 5, please replace paragraph [0022] with the following amended paragraph:

In the invention, non-ionic surfactants used include polyols partial fatty acid esters, polyoxyethylene aliphatic alcohol ether, polyoxyethylene alkyl phenol ether, ~~Triton~~ TRITON series (octylphenol ethoxylates). In the invention, Triton series such as ~~Triton X-100~~ TRITONTM X-100 and ~~Triton X-405~~ TRITONTM X-405 are preferably surfactants, of which ~~Triton X-100~~ TRITONTM X-100 is more preferable.

At page 6, please replace paragraph [0033] with the following amended paragraph:

To 100ml of cyclohexane was added ~~Triton X-100~~ TRITONTM X-100 octylphenol ethoxylate, water, and resultant mixture was stirred for 2 hours to obtain a reverse micelle solution. In the solution, the concentration of ~~Triton X-100~~ TRITONTM X-100 ranged from 0.15 to 0.3M, and the ratio between water and ~~Triton X-100~~ TRITONTM X-100 was 2. In this Example, isopropyl titanate together with 5 ml of acetyl acetone was added to the reverse micelle solution. The concentration of the titanate was 0.2M. After resultant solution was continuously stirred for about 1 hour to have isopropyl titanate hydrolyzed in nano-droplets of the reverse micelle solution, the solution became homogeneous and optically transparent. Stainless steel of Type 304 was then dipped into the reverse micelle solution and a wet TiO₂ film was formed onto the stainless steel by the withdrawing technique, or which the withdrawal speed was controlled at 4mm/s. The wet film was dried at 100°C for 60 minutes and then was calcined in a muffle roaster for 1, 2, 3, 4, 6, and 8 hours. Afterwards, the substrate was cooled to the room temperature to thereby obtain a series of TiO₂ crystalline thin films.